

## **Desktop GIS application for hostel management of Punjab University Lahore**

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To provide effective solution to escalating spatial problems of hostel management this paper provides a lay out of latest technologies which is applicable for not only interactive decision making, but also beneficial for risk management. The architectural plane of eight hostels of University of the Punjab, New campus Lahore and Google Earth imagery were selected to prepare geodatabase for spatial and non-spatial entities using ArcGIS 10. To manage effectively spatial and non-spatial data of a hostel requires the understanding and manipulation of a large number of variables. The spatial nature of the hostel and their associated resources were linked to students, departments and hostel management in Geographic Information System (GIS). Three storys buildings of these hostels were digitized as three different layers with other basic layers. Student's data linked with rooms for query and visualization. Hostel management system also provided facility to manage immovable assets glued to the hostel property allotted to students and management staffs. ArcReader 10 was used for the data disbursement to different hostel offices and related department for the management of hostel assets and illegal hostelized any time.